THE RECOVERY KERNEL

Substance-Specific Navigation Series

HOW TO RECOVER FROM LSD

Using the Recovery Kernel Framework

LSD · Lysergic Acid Diethylamide · Acid · Lucy · Tabs · Blotter · Microdots · Window Pane

⚠ HARM REDUCTION RESOURCE — NOT MEDICAL ADVICE | Crisis: call 911 or text 988

LSD DOES NOT PRODUCE PHYSICAL DEPENDENCE OR WITHDRAWAL. BUT THE PROBLEMS IT CAUSES ARE REAL.

This guide addresses HPPD, integration failure, psychosis risk, and psychological dependence.

A Note Before You Begin

The Recovery Kernel Compendium is precise about LSD in a way that is both accurate and unusual. It names the substance: 'Acid, Lucy → LSD (lysergic acid diethylamide) → Chemical precision displaces mystification.' It names the experience mechanism: 'The universe opened up → Prefrontal inhibition created a sense of vast significance → Brain event named accurately; the significance is the brain interpreting its own altered state.'

Both framings are true simultaneously. The universe did open up. And the mechanism was prefrontal inhibition creating a sense of vast significance. These are not contradictions. They are the same event described at different levels of resolution — the phenomenological and the neurological, both accurate, both incomplete without the other.

This guide holds both.

LSD is the most pharmacologically unusual substance in this entire guide series. It produces no physical dependence. It has no withdrawal syndrome. It does not trigger the dopaminergic reward circuitry that drives conventional addiction. Its tolerance develops so rapidly — full tolerance in three to four days of consecutive use — that daily use is pharmacologically impossible; the drug simply stops working. By every standard metric used to define an addictive substance, LSD scores extraordinarily low.

And yet. People develop profoundly problematic relationships with it. The universe opened up repeatedly, and something about the closing was unbearable. The perspective shift that ten doses produced became the only frame from which ordinary life felt tolerable. The visual phenomena of the trips began appearing uninvited in sober vision. The boundary between what LSD revealed and what LSD induced became impossible to locate. The integration of experiences that came faster than they could be metabolized created a psychological backlog that destabilized rather than illuminated.

This guide addresses these specific problems. It is not a conventional addiction recovery guide because LSD does not produce conventional addiction. It is a guide to the real complications that frequent or heavy LSD use produces — HPPD, integration failure, psychosis risk in vulnerable individuals, and the psychological dependence on altered states that no standard treatment framework adequately addresses.

The compendium's framework applies: what was the LSD providing? What biological and psychological deficit was it addressing? What is the structure of building genuine access to those states through means the nervous system actually owns?

Read Section 0 before anything else.

Section 0 — Immediate Safety: The Bad Trip Emergency

THE CENTURION — The Only Medical Emergency LSD Produces Is Psychological — and It Is Still an Emergency

LSD does not kill through overdose in the way opioids, stimulants, or depressants can. There is no direct physiological kill mechanism from LSD alone at any dose that has been described in the literature. The acute dangers of LSD are:

- Psychological emergency: a severe anxiety, terror, or paranoid episode during a trip that the person cannot manage
- Behavioral danger: impaired judgment during a trip leading to dangerous behavior (traffic, heights, water)
- Psychiatric emergency: precipitation of psychosis in vulnerable individuals — particularly those with personal or family history of schizophrenia or bipolar disorder
- Adulterant danger: the substance sold as LSD is frequently not LSD — and some adulterants (NBOMe compounds) are genuinely toxic and can kill

The Bad Trip Protocol — For the Person Experiencing It

⚠ A BAD TRIP IS NOT A MEDICAL EMERGENCY IN MOST CASES. CALLING 911 INTRODUCES STRESS, STRANGERS, AUTHORITY, AND NOVEL ENVIRONMENTS — ALL OF WHICH INTENSIFY THE EXPERIENCE. CALL 911 ONLY IF THE PERSON IS IN PHYSICAL DANGER OR IS HAVING A PSYCHIATRIC BREAK THEY CANNOT BE TALKED OUT OF.

What is happening	What to do	What not to do
Severe anxiety, terror, or panic during the trip	Change environment immediately — move to a quiet, dimly lit, familiar space. Lie down. Reduce all sensory input. Have one calm, trusted person stay with you and talk gently. The 4-7-8 breath — slowly. Remind yourself: this is temporary. The drug has a known duration. It will end.	Do not try to 'fight' the experience or distract from it aggressively. Do not add stimulants (caffeine amplifies anxiety). Do not go to unfamiliar, crowded, or loud environments. Do not be left alone.
Panic that cannot be managed with the above	Benzodiazepines are the pharmacological trip-termination tool. Diazepam (Valium) 10mg or lorazepam (Ativan) 1–2mg significantly reduce the anxiety component	Do not give antipsychotics (haloperidol, etc.) as a first response — they can produce dysphoric reactions and are not the appropriate first-line for LSD panic. Benzodiazepines are the

	of the LSD experience. If a physician, emergency room, or harm reduction service is accessible, this is the appropriate intervention. The trip does not end abruptly — the benzodiazepine edges the anxiety to a manageable level.	standard of care for acute LSD anxiety.
Psychotic break — person does not know what is real, has lost contact with the trip-context	This is a medical emergency. Call 911 or take the person to an emergency department. Psychiatric evaluation is needed. Tell the emergency physician specifically: 'This person has taken LSD and is experiencing what may be a psychotic episode.' Benzodiazepines first-line, with psychiatric assessment.	Do not attempt to manage this alone if the person is a danger to themselves or others. Do not leave them alone. Do not wait to see if it resolves without intervention.
Behavioral danger — person is near traffic, water, heights	Physical safety before anything else. Calmly guide the person away from the danger. If they cannot be safely redirected: call 911. A broken arm is better than a fatality. Physical safety overrides every other consideration.	Do not try to restrain someone aggressively — this escalates panic and can lead to injury. Calm, low-key physical guidance only.

The Trip Sitter Protocol — For the Person Supporting

THE CENTURION — The Most Important Role in LSD Harm Reduction Has No Pharmacological Component

A trip sitter is a sober person who remains present with someone during an LSD experience. The role requires specific behaviors — not the instinct to fix, distract, or problem-solve, but the capacity to hold steady while the other person moves through the experience.

- Stay calm: your emotional state is perceived acutely by the person on LSD. Anxiety in the sitter produces anxiety in the tripper. Calm is the primary offering.
- Do not talk continuously: silence, light music, and gentle presence are more helpful than narrative. If they want to talk, let them. If they don't, don't fill the space.
- Do not interpret the experience: 'I think what you're experiencing means...' is not helpful during a difficult moment. 'You're safe. I'm here. This will pass.' is.
- Anchor to physical reality where needed: gentle touch (with permission), a glass of water, a blanket, stepping outside — physical grounding techniques when the person needs orienting.

- Know the duration: standard LSD is 8–12 hours. The peak is typically hours 2–5. Knowing the timeline allows genuine reassurance: 'You are four hours in. The peak is likely past. This will be significantly gentler in an hour or two.'
- Know when to call 911: persistent psychotic symptoms; genuine danger; physical medical emergency. The trip sitter is the decision-maker for escalation.

The Adulterant Emergency — NBOMe Compounds

⚠ THE SUBSTANCE SOLD AS LSD IS FREQUENTLY NOT LSD. NBOMe COMPOUNDS (25I-NBOMe, 25C-NBOMe) ARE SOLD ON BLOTTER PAPER AND ARE FAR MORE TOXIC THAN LSD — THEY CAN CAUSE DEATH AT DOSES THAT WOULD BE SUBPERCEPTUAL FOR LSD.

NBOMe compounds are active at microgram doses (like LSD) and can be placed on blotter paper (like LSD) — making them nearly indistinguishable from LSD without testing. Their effects are similar in character but occur at significantly lower doses, and their toxicity profile is dramatically more dangerous: seizures, cardiac arrhythmia, hyperthermia, and death at high doses.

Ehrlich reagent test: The primary harm reduction tool for LSD. Ehrlich reagent turns purple in the presence of indoles — LSD is an indole alkaloid. If Ehrlich reagent is applied to blotter paper and does not turn purple, the substance is NOT LSD. NBOMe compounds are not indoles and do not turn purple with Ehrlich. This test is widely available online and inexpensive. If you are using LSD without testing it first: test it. The reagent is available from harm reduction organizations and online.

The bitter taste: Genuine LSD has essentially no taste at active doses. A bitter, chemical, or numbing taste from blotter paper is a strong indicator of NBOMe contamination. This is not 100% reliable but is a useful real-time signal.

If NBOMe poisoning is suspected: Call 911. NBOMe overdose produces the same physical symptoms as stimulant overdose (hyperthermia, seizure, cardiac event) with a psychedelic overlay. The emergency department needs to know the suspected substance. Treatment is supportive — benzodiazepines for agitation/seizure, cooling for hyperthermia, cardiac monitoring.

Section 1 — What LSD Did to Your Brain

THE CENTURION — Prefrontal Inhibition Created a Sense of Vast Significance — The Compendium's Exact Framing

The compendium offers the most precise and most honest description of what LSD does: 'The universe opened up → Prefrontal inhibition created a sense of vast significance → Brain event named accurately; the significance is the brain interpreting its own altered state.'

This framing contains everything. The universe opened up — this is phenomenologically accurate; that is what the experience is like. Prefrontal inhibition created a sense of vast significance — this is mechanistically accurate; that is what LSD does to the brain. Brain event named accurately; the significance is the brain interpreting its own altered state — this is the integration challenge; the meaning of what was experienced requires disambiguation from the mechanism that produced the experience.

These are not contradictions. They are lenses. The guide holds all of them.

1.1 — The 5-HT2A Mechanism

THE CENTURION — The Most Potent Serotonin Receptor Agonist Known to Exist — at Microgram Doses

LSD is a partial agonist at serotonin 5-HT2A receptors — the postsynaptic serotonin receptors concentrated in the prefrontal cortex, thalamus, and cortical pyramidal neurons. Active at doses of 25–100 micrograms (millionths of a gram), LSD is among the most potent pharmacological agents known. At these doses, 5-HT2A receptor activation produces:

Effect	Mechanism	Subjective experience
Default Mode Network (DMN) suppression	5-HT2A activation in the prefrontal cortex disrupts the Default Mode Network — the brain's self-referential processing system. The DMN generates the ordinary sense of being a bounded, continuous self with a specific history, identity, and set of concerns.	Ego dissolution — the sense that the ordinary self has temporarily ceased. The boundaries between self and world become permeable or disappear. This is the phenomenon the compendium's language points at: prefrontal inhibition removing the apparatus that generates the ordinary self-narrative.
Thalamocortical gating disruption	The thalamus normally filters sensory information before it reaches the cortex — preventing the majority of	Visual and auditory hallucinations, synesthesia (senses crossing — sounds producing colors, etc.),

	sensory input from reaching conscious awareness. LSD disrupts this gating function, flooding the cortex with unfiltered sensory information.	geometric patterns, trails behind moving objects, enhanced pattern recognition. The world becomes more — more textured, more patterned, more significant.
Glutamate increase in prefrontal cortex	5-HT2A activation on prefrontal pyramidal neurons dramatically increases glutamate release — the primary excitatory neurotransmitter. This creates a state of elevated cortical excitability and novel connectivity.	The sense that previously unconnected ideas are suddenly related. Pattern recognition amplified — everything seems to mean something and to connect to everything else. The 'significant' quality of the LSD experience is partly this enhanced connectivity.
Neuroplasticity and BDNF induction	5-HT2A activation triggers BDNF release and promotes dendritic spine growth in the prefrontal cortex — producing measurable neuroplasticity within hours. This is the mechanism of interest in therapeutic psychedelic research.	The 'afterglow' — the days following a trip where perception seems clearer, connections between ideas come more readily, and entrenched thought patterns feel temporarily loosened. This is neuroplasticity, not continued drug effect.
Serotonin receptor downregulation (with repeated use)	Chronic 5-HT2A overstimulation produces receptor downregulation and decreased receptor sensitivity — the brain's compensatory response to excessive activation of any receptor system.	Tolerance: the trip becomes less intense at the same dose. The afterglow diminishes. The perceptual effects require higher doses. The neuroplastic opening that early trips produced becomes harder to access. This is the trajectory of frequent LSD use.

1.2 — The Rapid Tolerance — Why Daily Use Is Impossible and Weekly Use Accumulates Differently

THE CENTURION — The Biological Constraint That LSD Built Into Itself

LSD produces tachyphylaxis — complete tolerance develops within 3–4 days of consecutive use. A dose that produces a full 8–12 hour experience on Day 1 produces essentially no perceptible effect on Day 4. This is the most rapid tolerance development of any substance in this guide series, and it is why classic addiction patterns — daily compulsive use driving escalating doses — do not apply to LSD.

But the rapid tolerance does not prevent problematic use. It shapes it differently:

- Weekly or biweekly dosing: the most common pattern among frequent LSD users — timed to allow partial tolerance resolution between experiences. This

produces a rhythm of trips that, over months, can accumulate a significant backlog of unintegrated experiences.

- Dose escalation over time: as 5-HT2A receptors downregulate with even weekly use, doses increase to achieve the same depth of experience. Higher doses carry higher HPPD risk, higher psychosis risk, and more intense experiences that are harder to integrate.
- The integration debt: a trip every week over six months produces roughly 24–26 experiences. Each experience contains material — insights, emotions, perceptions, revelations, fears — that requires time and attention to integrate. Without adequate integration time, the psychological material accumulates as a backlog that can produce instability, anxiety, and confusion even in sober states.

1.3 — Why LSD Is Problematic When It Isn't Conventionally Addictive

THE CENTURION — The Questions This Substance Asks That Standard Recovery Frameworks Cannot Answer

Standard addiction frameworks — built around dopaminergic reward, compulsive use despite consequences, physical dependence, withdrawal — do not apply well to LSD. LSD does not produce significant dopamine release. It does not create physical dependence. It has no withdrawal syndrome. Compulsive daily use is pharmacologically impossible due to rapid tolerance.

Yet the person reading this guide has a problem with LSD. The problem may be one or more of:

The problem	What it actually is	What the recovery addresses
HPPD — visual phenomena appearing in sober states	Hallucinogen Persisting Perception Disorder: visual phenomena that appear after LSD use has stopped, lasting weeks, months, or years. The compendium names this explicitly. Usually benign but distressing — particularly when it is not understood.	Section 4 of this guide addresses HPPD comprehensively. It is not psychosis. It is not permanent for most people. It is a specific neurological condition with specific management approaches.
Integration failure	The accumulation of powerful experiences that have not been metabolized — turned from raw phenomenon into meaning, updated worldview, behavioral change. Unintegrated trips can produce anxiety, confusion, depersonalization, and difficulty	Section 5 addresses the integration work. This is the dimension of LSD recovery that most differentiates it from every other guide in this series — the recovery target is primarily psychological and existential rather than neurochemical.

	functioning.	
Psychosis precipitation	LSD can trigger psychotic episodes in individuals with personal or family history of schizophrenia, bipolar disorder, or other psychotic conditions. For these individuals, LSD use is contraindicated regardless of dose or frequency.	Section 8 addresses this dimension. If psychosis has been triggered by LSD, psychiatric management is the primary recovery track — not this guide alone.
Psychological dependence on the altered state	The ordinary state of consciousness — without the significance, the connection, the opened perception — feels insufficient after repeated contact with the LSD state. Not physically craved, but existentially missed. The sober world feels narrow.	The natural addiction porting in Section 6 addresses this directly. The compendium's framework for the DMN suppression states of meditation and contemplative practice as the sustainable replacement for what LSD was providing.
The spiritual emergency	LSD can precipitate what transpersonal psychology calls a spiritual emergency — a destabilizing opening of psychic or spiritual dimensions that the person's existing conceptual framework cannot contain. Not psychosis, but not comfortable.	This requires specific support — ideally from a therapist or guide familiar with both psychedelic phenomenology and spiritual crisis support. Standard addiction treatment is inadequate for this presentation.

1.4 — The LSD Duration and Experience Architecture

Understanding the pharmacological structure of the LSD experience is useful for both harm reduction and recovery:

Phase	Timing	What is happening
Onset	30–90 minutes post-ingestion (sublingual) or 45–120 minutes oral	5-HT2A receptors beginning to be activated; mild sensory enhancement; mood shift; anticipatory period. The person is still substantially oriented to ordinary reality.
Ascent	Hours 1–3	DMN suppression increasing; visual phenomena intensifying; ego boundaries loosening; pattern recognition amplifying; emotional content surfacing. This phase is where set and setting have the most influence on the character of the experience.
Peak	Hours 3–6	Maximum DMN suppression — the peak of ego dissolution; maximum visual and perceptual phenomena; maximum intensity of whatever emotional and psychological content the

		experience is processing. This is the phase that produces both the most profound openings and the most intense difficult experiences.
Plateau and descent	Hours 6–10	5-HT2A receptor activation diminishing; DMN beginning to reconstitute; emotional content often gentler; reflective processing begins; the person begins to metabolize what occurred at peak.
Resolution	Hours 10–12	Largely returned to ordinary perception; some residual sensory enhancement; the 'afterglow' begins; fatigue common; the quality of this period is heavily influenced by how the peak experience was held.
Afterglow	Days 1–3 following	The period of BDNF-enhanced neuroplasticity and loosened cognitive rigidity that follows LSD. The most valuable integration window. What is done in this period — journaling, therapy, reflective practices — shapes how the experience becomes meaning rather than remaining unprocessed phenomenon.

Section 2 — Your Genomic Blueprint

LSD's genomic profile differs from every other substance in this series because it targets a receptor system (5-HT2A) that most other substances do not primarily address. The key variables are serotonin receptor sensitivity, psychosis risk genotype, and metabolism — all of which determine who is most vulnerable to HPPD, who faces psychosis risk, and who metabolizes LSD most effectively.

The DNA Testing Panel for LSD Recovery

Gene	What it controls	Key variant	LSD recovery relevance
HTR2A	Serotonin 5-HT2A receptor — the primary receptor LSD acts on	rs6313, rs6311, rs7997012 — various variants affecting receptor expression and sensitivity	THE most relevant gene for LSD sensitivity and HPPD risk. HTR2A variants affect 5-HT2A receptor density in the prefrontal cortex and cortical pyramidal neurons — determining how intensely LSD's primary mechanism operates. High-expression HTR2A variants produce more intense LSD experiences at the same dose, more profound DMN suppression, and likely higher HPPD risk with frequent use. If LSD consistently produced more intense experiences than peers reported at equivalent doses, a high-expression HTR2A variant is the likely explanation.
COMT	Catecholamine clearance — dopamine, norepinephrine, epinephrine	Val158Met (rs4680) — particularly Met/Met (Sage) for psychosis risk	COMT Met/Met (Sage, slow clearance) is associated with higher baseline dopamine and catecholamine tone — and with higher vulnerability to psychosis when these systems are further destabilized by psychedelics. The compendium documents the Sage constitution's susceptibility to overstimulation. LSD's glutamate release in the prefrontal cortex, combined with the Sage's already-elevated dopamine and catecholamine tone, creates the highest-risk combination for psychosis precipitation. Val/Val (Warrior) has lower psychosis risk from LSD but may find the experience

			less profound at equivalent doses.
MTHFR	Methylation — serotonin synthesis foundation	C677T (rs1801133), A1298C (rs1801131)	MTHFR variants that reduce baseline serotonin synthesis capacity mean the serotonin system that LSD was flooding was already operating below optimal output. Recovery: 5-MTHF supplementation addresses the baseline serotonin synthesis deficit — supporting recovery of the 5-HT2A receptor system and the general serotonergic tone that LSD use has disrupted. Also relevant for HPPD recovery: serotonin system health is integral to the visual processing normalization that HPPD requires.
SLC6A4 / 5-HTTLPR	Serotonin transporter expression	Short/short allele (reduced SERT expression)	SLC6A4 short/short carriers have reduced serotonin transporter expression and higher serotonin sensitivity. LSD's 5-HT2A agonism is experienced more intensely in the context of a serotonin system with already-elevated sensitivity. These individuals may have been drawn to LSD partly for its serotonergic social and emotional opening effects — which overlap with MDMA's serotonergic properties at moderate doses. Recovery must address the serotonin system's baseline alongside the 5-HT2A receptor recovery.
DRD2 / ANKK1	D2 receptor density — psychosis risk	Taq1A (rs1800497) A1 allele — reduced D2 density	D2 receptor density is relevant to LSD's psychosis risk through the dopamine-serotonin interaction in mesolimbic pathways. Low D2 density (A1 allele) combined with Met/Met COMT creates the highest LSD psychosis risk profile. Neither variant alone defines the risk — the combination matters. COMT + DRD2 genomic profiling is the most useful pre-LSD risk assessment tool available.
CYP2D6 + CYP3A4	LSD metabolism — CYP2D6 minor; CYP3A4 primary hepatic clearance	CYP2D6 poor metabolizer (*4/*4) and CYP3A4 inhibitors	LSD metabolism is primarily hepatic through CYP3A4, with CYP2D6 playing a minor role in some metabolic pathways. Poor CYP2D6 metabolizers may experience somewhat prolonged LSD effects. More clinically relevant: CYP3A4 inhibitors (fluconazole, certain antibiotics, grapefruit) can significantly prolong and intensify LSD effects by slowing clearance —

			an underappreciated drug interaction risk. This is one reason LSD doses can be profoundly unpredictable: drug interactions the person is unaware of.
FKBP5 / NR3C1	HPA axis stress response and glucocorticoid receptor function — relevant to psychosis risk and integration difficulty	Various variants affecting stress response sensitivity	FKBP5 variants associated with exaggerated stress response (particularly in trauma history context) are relevant to LSD integration because the psychological content that LSD surfaces can be intensely stressful and trauma-adjacent. High-stress-response individuals processing difficult material in LSD states face higher integration challenges and higher acute psychological crisis risk. Trauma history is a specific contraindication for unsupported LSD use regardless of genomics.

Who Should Not Use LSD — The Psychosis Contraindication

⚠ LSD IS CONTRAINDICATED FOR ANYONE WITH PERSONAL OR FAMILY HISTORY OF SCHIZOPHRENIA, SCHIZOAFFECTIVE DISORDER, OR BIPOLAR DISORDER WITH PSYCHOTIC FEATURES. THIS CONTRAINDICATION IS ABSOLUTE AND IS NOT OVERRIDDEN BY DOSE, EXPERIENCE, SETTING, OR INTENT.

LSD's glutamate release in the prefrontal cortex combined with dopamine system dysregulation in susceptible individuals can precipitate psychotic episodes that may persist long after the drug has cleared. The genetic variants most associated with this risk: COMT Met/Met + DRD2 A1 allele + personal/family psychiatric history.

If psychosis has already been precipitated by LSD use: psychiatric management is the primary recovery track. Antipsychotic medication, psychiatric monitoring, and clinical support are required. This guide supports that process but does not replace it.

Section 3 — The Recovery Framework: What Is Actually Needed Here

THE CENTURION — This Is the Only Guide in This Series With No Detox Protocol — Because There Is Nothing to Detox From

LSD produces no physical dependence and no withdrawal syndrome. There is no medical detox to navigate, no taper to design, no seizure risk to manage. The body does not go through physical withdrawal from LSD because it was never physically dependent on it.

What this guide provides in place of a detox protocol is a recovery framework — a structured approach to the specific challenges that LSD use creates:

Recovery challenge	Timeline	Primary interventions
HPPD (Hallucinogen Persisting Perception Disorder)	May begin during use or within days/weeks of stopping. Typically diminishes over months to years. Some cases persist longer.	Section 4 of this guide. Complete cessation of LSD and all serotonergic substances. Specific medical management where indicated. Anxiety management for the distress that HPPD produces.
Integration backlog — unprocessed experiences	Present from the time of frequent use; addressed over months to years of active integration work.	Section 5 of this guide. Journaling. Therapy (ideally with a psychedelic-informed therapist). Contemplative practice. Community with others doing similar work.
Psychological dependence on the altered state	Felt from early in the cessation period; gradually resolves as the natural access to expanded states develops.	Section 6 of this guide. Natural porting of the awe, significance, and perspective-shift through meditation, nature, creativity, and contemplative practice.
Depersonalization / derealization (if present)	Can appear during heavy use or following. Variable duration — often months.	Section 8 — medical management. Grounding practices. Avoiding cannabis (a common exacerbating factor). Anxiety management. Specific clinical pathways for persistent cases.
Psychosis (if precipitated)	Requires immediate psychiatric intervention. Duration variable.	Not primarily addressed in this guide — psychiatric management, antipsychotic medication, and specialist support are the primary

		pathway.
Meaning crisis / existential disruption	Can persist years after LSD cessation — the worldview reorganization that LSD initiated is not reversed simply by stopping.	The integration work, contemplative tradition, community, and therapeutic support in Sections 5 and 6. Sometimes the meaning crisis IS the most important work of the person's life — regardless of its origins.

3.1 — The Aftermath Timeline

Timeline	What is happening	Challenges	What to do
Days 1–14 (post-cessation)	5-HT2A receptor density slowly recovering toward baseline. BDNF from recent sessions may still be elevated. The boundary between trip content and sober reality may feel permeable.	HPPD symptoms if present are often most noticeable in this period. Sleep disruption. Processing difficulty — the mind continues working through the experiences. Possible anxiety.	Complete cessation of LSD. Avoid cannabis (exacerbates visual phenomena and depersonalization for many people). Begin sleep protocol and methylation support. Begin journaling.
Weeks 2–8	5-HT2A receptor sensitivity normalizing. The perceptual phenomena of HPPD, if present, often reduce in this window. The integration work begins to produce clarity.	HPPD may fluctuate — more noticeable in anxiety states, fatigue, or when cannabis is used. The existential and meaning-making dimensions of the experience may be most active.	Active integration practices. Therapy if available. Community. The natural perception recovery is supported by exercise (BDNF), sleep (serotonin synthesis), and MTHFR methylation support.
Months 1–6	5-HT2A receptor system largely recovered. HPPD diminishing for most people. Integration work producing meaning. The psychological dependence on altered states being addressed through natural practice.	The meaning that LSD opened may not fully metabolize into the life — this is the integration work's long arc. Episodic HPPD may persist for some.	The contemplative and creative practices of Section 6. Ongoing therapy if integration is complex. HPPD management if persistent.

Months 6–24+	Most HPPD cases have substantially resolved. The integration of the LSD experiences is an ongoing process — the material is being slowly metabolized into genuine life wisdom rather than remaining raw experience.	Residual HPPD in some. The meaning question remains active — it may be the most important question of the person's life.	The long game: the person who has genuinely integrated what LSD opened is richer for it. The practices developed in recovery — meditation, contemplative engagement, creative work, genuine connection — are not substitutes for LSD. They are the real thing.

Section 4 — HPPD: Hallucinogen Persisting Perception Disorder

THE CENTURION — The Compendium Names It, Defines It, and Distinguishes It from Psychosis

The compendium is explicit: 'HPPD — Hallucinogen Persisting Perception Disorder — is a specific condition following psychedelic use in which visual phenomena persist for months to years. It is generally benign, usually diminishes over time, and is more common with heavy, frequent psychedelic use.'

HPPD is the most common organic complication of LSD use and the one most people have never heard of before experiencing it. It is deeply distressing when it is not understood — and much less distressing when it is. This section provides complete understanding.

4.1 — What HPPD Is and What It Is Not

HPPD phenomena	What distinguishes it from psychosis	What distinguishes it from a trip
Visual snow — a static or 'snow' effect overlaid on visual field, particularly in low light	The compendium: 'visual echoes in recovery are brief, peripheral, and dissolve when looked at directly.' The person knows these phenomena are not real objects. The questioning of what is real is itself evidence it is HPPD not psychosis.	HPPD phenomena occur in the sober state. They are typically less intense than during a trip. They are not accompanied by the full altered state of consciousness — just isolated perceptual phenomena.
Afterimages — visual persistence after looking away from objects; trailing effects behind moving objects	The person experiencing HPPD does not believe the visual phenomena represent external reality. This intact reality testing is the clinical distinction from psychosis — which involves loss of reality testing.	HPPD does not produce ego dissolution, profound meaning shifts, or the full phenomenology of the LSD experience. It is specifically perceptual — visual phenomena without the broader altered state.
Geometric patterns or fractal-like imagery, particularly when eyes are closed or in low light	If you are asking 'is this real?' — the questioning itself is evidence of intact reality testing. The compendium: 'if you are questioning whether what you see is real, the	HPPD phenomena are consistent and similar between episodes. They do not escalate to voices, command hallucinations, or persecutory beliefs. These are psychotic features that

	questioning itself is evidence that you are experiencing an artifact and not a psychotic episode.'	HPPD does not include.
Halos around lights; intensified colors; visual processing anomalies	HPPD worsens with anxiety, cannabis use, fatigue, and certain medications (SSRIs may worsen visual phenomena for some). It improves with sleep, reduced anxiety, and time. Psychosis follows a different pattern.	HPPD is annoying, distressing, and disorienting — but it does not prevent functioning. Severe HPPD can be disabling, but mild-moderate HPPD allows continued work, relationships, and ordinary life.

4.2 — HPPD Prevalence, Risk Factors, and Prognosis

- Prevalence: estimated 4–5% of psychedelic users develop HPPD to some degree — making it a real risk but not a high-probability outcome of occasional use
- Risk factors: frequency of use (more trips = higher risk), high doses, use of multiple psychedelics together, cannabis co-use, prior anxiety disorder, prior head injury
- Prognosis: most cases resolve substantially within months to years with complete psychedelic cessation. Some cases persist longer. A small minority of cases are long-lasting at clinically significant levels. The trajectory is almost always toward improvement with cessation and time.
- Exacerbating factors: cannabis (the most reliably reported HPPD worsener — avoid), anxiety (worsens visual phenomena), fatigue, fluorescent lighting, screens, stress
- Improving factors: time, cessation, sleep, reduced anxiety, darkness, rest

4.3 — HPPD Management Protocol

THE CENTURION — Most People With HPPD Need Understanding More Than Medication

The most powerful single intervention for HPPD is accurate information about what it is. The person who understands that HPPD is a benign, generally time-limited perceptual phenomenon — not psychosis, not permanent brain damage, not evidence of a deeper disorder — can engage with it from a position of equanimity rather than terror. The terror of not knowing what is happening amplifies HPPD through the anxiety mechanism (anxiety worsens visual phenomena).

Intervention	Mechanism	Implementation

Complete psychedelic cessation (non-negotiable)	5-HT2A receptors cannot recover density and sensitivity while continuing to be overstimulated. Cessation is the prerequisite for all other HPPD management.	Stop all LSD, psilocybin, DMT, mescaline, and any other 5-HT2A agonist. This is not optional in HPPD management — the visual phenomena cannot meaningfully improve while the receptor system remains under active stimulation.
Cannabis cessation (strongly recommended)	Cannabis is the most consistently reported exacerbating factor for HPPD — THC produces significant visual phenomena exacerbation through its own receptor interactions with the 5-HT2A system. Many people with HPPD report dramatic improvement within weeks of stopping cannabis.	Complete cannabis cessation during HPPD recovery. This is clinically well-supported. If cannabis cessation produces significant anxiety (which may underlie the HPPD in part), anxiety management tools (Section 4.3 below) address this independently.
Anxiety management	Anxiety amplifies HPPD through the thalamocortical gating mechanism — increased arousal opens the sensory filter that HPPD is already disrupting. Reducing anxiety reduces HPPD symptoms in most cases.	4-7-8 breathwork practice (daily, minimum 10 minutes). Magnesium glycinate 400mg evening. L-theanine 200mg as needed. Exercise. The compendium's full anxiety management architecture (Protocol 01) applies directly.
Sleep optimization	Sleep is when 5-HT2A receptor density recovers. Sleep deprivation worsens HPPD by maintaining the sensitized thalamocortical gating that HPPD reflects. HPPD symptoms are consistently worse with sleep deprivation.	Implement the full sleep protocol from the compendium (Protocol 17). HPPD-specific addition: avoid screens in the 2 hours before bed — the visual stimulation from screens activates the same perceptual processing that HPPD is disrupting. Darkness and visual rest support 5-HT2A receptor recovery.
Neuroprotective supplement support	The oxidative stress from frequent 5-HT2A overstimulation contributes to the perceptual processing changes of HPPD. Antioxidant support for neuronal membrane health supports recovery.	Omega-3 DHA 2g daily (neuronal membrane health; 5-HT2A receptor environment). NAC 600mg morning (glutathione precursor; antioxidant). Magnesium glycinate (NMDA modulation supporting perceptual normalization). Alpha-lipoic acid 300mg (blood-brain barrier crossing antioxidant).

4.4 — When Medication Is Needed for HPPD

Most HPPD resolves with time and the above interventions. For severe or persistent HPPD that is significantly impairing daily function, clinical management is appropriate:

- Clonazepam (Klonopin): low-dose benzodiazepine — reduces HPPD symptoms acutely through GABA-A modulation that reduces cortical hyperexcitability. Most effective for symptom management in severe cases. CRITICAL: benzodiazepine dependence risk means this is NOT a long-term solution — short-term use for severe cases only, with strict limits.
- Lamotrigine: anticonvulsant with glutamate-modulating properties. Case series support its use in HPPD — likely through reducing the cortical hyperexcitability that underlies visual phenomena. Requires prescriber and regular blood monitoring.
- AVOID SSRIs for HPPD: SSRIs may worsen visual phenomena in HPPD — possibly through increased serotonin availability activating 5-HT2A receptors indirectly. If depression co-occurs with HPPD, discuss the treatment approach carefully with a psychiatrist familiar with HPPD.
- AVOID antipsychotics (conventional): traditional antipsychotics (haloperidol, etc.) have been reported to worsen HPPD in some cases. Atypical antipsychotics with 5-HT2A antagonism (risperidone) have shown mixed results — some improvement, some worsening. Specialist consultation before any antipsychotic in the HPPD context.
- HPPD specialist resources: the HPPD community and clinical literature have grown significantly. Neurologist or psychiatrist with psychedelic experience is the appropriate referral. HPPD-specific support communities exist online and provide peer support from people who understand the specific phenomenology.

4.5 — Depersonalization and Derealization

A subset of LSD users develop depersonalization (feeling detached from one's own body, thoughts, or actions — as if observing oneself from outside) or derealization (the world seeming unreal, dreamlike, or artificial) that persists after LSD cessation. These experiences often emerge from HPPD or from integration failure and are distinct from HPPD in mechanism but frequently co-occur.

- Depersonalization/derealization (DP/DR) is not psychosis — the person remains aware that the experience is subjectively distorted and does not represent external reality.
- Key exacerbating factors: anxiety (by far the most significant), cannabis, sleep deprivation, caffeine, alcohol, and any dissociative substances.
- Management: grounding practices (the compendium's Protocol 01 — 4-7-8 breath, physical sensation anchoring, cold water, exercise). Anxiety reduction (the primary driver of DP/DR is anxiety — the Sage constitution's chronic

overstimulation is particularly relevant). Cessation of all substances including cannabis and alcohol.

- If DP/DR is persistent and impairing: psychiatric referral, specifically for therapists familiar with DP/DR disorder (DPDR). CBT-based approaches have evidence. SSRIs may help the anxiety component — with the HPPD caveat above.

Section 5 — The Integration Work

THE CENTURION — The Difference Between Experience and Wisdom Is Everything That Happens Between Them

Integration is the process of transforming a raw psychedelic experience into something useful — into updated understanding, behavioral change, resolved questions, or metabolized emotion. Without integration, powerful LSD experiences remain as isolated events: vivid, sometimes overwhelming, and eventually disorienting in the accumulation.

The compendium's psychedelic sonic protocol is precisely titled: 'expanded awareness — for feeling trapped in narrow perspective; integration of difficult material.' The word 'integration' is the operative one. The expanded awareness is the event. Integration is the work that makes the event meaningful rather than merely intense.

5.1 — What Integration Is and Isn't

- Integration IS: turning the content of the LSD experience into updated worldview, resolved questions, changed behavior, processed emotion, or deepened understanding of oneself and the world
- Integration IS: the ongoing reflective work that happens in the days, weeks, and months following an experience
- Integration IS: recognizing which aspects of what was experienced were insight, which were artifact, and which require further inquiry
- Integration IS NOT: having the experience again to make sense of it — using LSD to integrate LSD is the trap that produces the accumulation rather than the resolution
- Integration IS NOT: converting every psychedelic experience into a belief system or rigid narrative about the nature of reality
- Integration IS NOT: completed — the richest integration processes continue for years

5.2 — The Integration Backlog — What Happens With Frequent Use

THE CENTURION — Each Trip Is a Door. Integration Is Learning to Live in the Room Beyond It.

A person who has had 24 LSD experiences in a year has 24 sets of psychological content that each required integration time — time to journal, reflect, discuss, and allow the experience's material to settle into meaning. If the time between trips was a week, and adequate integration of a significant psychedelic experience requires

weeks to months, the mathematics produce a backlog: experiences arriving faster than they can be metabolized.

The symptoms of an integration backlog:

- Difficulty distinguishing what the LSD revealed from what LSD produced — uncertainty about whether insights were genuine or artifacts of the pharmacological state
- Persistent altered quality to ordinary perception even when sober — the residue of unmapped experiences contaminating the sober state
- Anxiety without clear cause — the psychological material from unmapped experiences generating distress without accessible context
- Cognitive difficulty organizing thoughts or maintaining consistent worldview — the competing frames from multiple unintegrated experiences generating cognitive noise
- The sense that something important was encountered but cannot be accessed — like a word on the tip of the tongue, but the word is a transformed understanding of one's life

5.3 — The Integration Toolkit

Practice	What it provides	How to implement
Journaling — during the afterglow window	The BDNF-enhanced neuroplasticity of the 48–72 hours after an LSD experience is the highest-value integration window. Written reflection during this window has disproportionate integrative power compared to writing weeks later.	Write immediately after the experience while the content is accessible. Not interpretation — description first. What was experienced, as precisely as language allows. Interpretation comes later. Return to the journal entries weeks and months later when the cognitive distance allows different understanding.
Psychedelic-informed therapy	A therapist familiar with psychedelic phenomenology can help distinguish insight from artifact, process difficult material, and provide context for unusual experiences without pathologizing them or mystifying them.	Not all therapists are appropriate here — a therapist who pathologizes the psychedelic experience as inherently dangerous, or one who uncritically validates all psychedelic content as spiritual revelation, are both unhelpful. Seek a therapist who can hold both the phenomenological reality and the neurological mechanism simultaneously.
Community with	The integration of LSD	Integration circles, psychedelic-

others doing similar work	experiences is significantly supported by others who understand the territory — who can normalize unusual experiences, share different frames, and provide human contact that grounds the integration in relational reality.	specific support groups, transpersonal psychology communities, and certain contemplative traditions provide this. The compendium's community architecture protocols (Protocol 08, 22) apply — but the specific community must understand the territory.
Contemplative practice	The contemplative traditions — meditation, yoga, martial arts, prayer, monastic discipline — have spent millennia developing frameworks for exactly the territory that LSD opens: the dissolution of ordinary ego structure, the encounter with the vastness of awareness, the integration of the expanded into the ordinary.	Any established contemplative tradition provides frameworks and community for the territory LSD opens. Many practitioners have found that the LSD opening pointed them toward contemplative practice as the sustainable path to the states they found in the drug. The practice provides structure for experiences that would otherwise remain uncontained.
Somatic work — the body's integration	LSD experiences are stored in the body as well as the mind. Somatic therapy, yoga, martial arts, breathwork, and other body-based practices support the integration of experiences that cognitive processing alone cannot fully reach.	Yoga and breathwork practices specifically designed for integration are available through transpersonal and psychedelic integration practitioners. The compendium's Protocol 03 (exercise and movement) applies as a foundation.
Creative expression	Art, music, writing, and other creative practices provide non-verbal channels for integrating experiences that resist conceptual framing. The compendium: 'flow from creation builds something; flow from destruction only takes.' The creative work that LSD often inspires is itself an integration practice.	Use the creative impulse that LSD generates or leaves in its wake. The paintings, music, writing, or other creative work produced during and after LSD periods are often genuine integration tools — the experience moving through a productive channel toward form.

5.4 — The Meaning Crisis — When the Opening Destabilizes

THE CENTURION — The Universe Opened and the Furniture of the Old Meaning Has Become Unrecognizable

LSD can initiate genuine meaning crises — not in the pathological sense of breakdown, but in the philosophical sense of the existing framework for

understanding one's life becoming inadequate to contain what was experienced. The ordinary meanings — career, identity, relationship structures, belief systems — that organized life before LSD may feel insufficient, arbitrary, or even absurd after repeated LSD experiences.

This is not illness. It is what William James called the noetic quality of mystical experience — the felt sense that the experience conveyed genuine knowledge about the nature of things. Whether it did, and what that knowledge is, and what implications it carries — this is the integration question.

The compendium's philosophical anchors are relevant here. Every major tradition has grappled with exactly this: the encounter with an expanded awareness that destabilizes the ordinary construction of self and world. The Zen tradition calls it satori — the moment of seeing clearly. The Christian mystics described it as apophatic experience — knowing through unknowing. The Sufi path uses the term fana — the dissolution of the ego self in the face of the absolute.

LSD did not create this territory. It provided rapid access to it — without the preparation that the traditions provide and without the community that makes the navigation possible. Integration is partly finding the map and the community that can hold what was encountered.

Section 6 — Porting the Addiction: Building the Earned Opening

THE CENTURION — Centurian Paper C-28 Applied to LSD Recovery — The Significance the Brain Was Already Built to Find

The compendium names what LSD was providing: prefrontal inhibition creating a sense of vast significance. The brain interpreting its own altered state. The universe opening.

The natural addiction porting question for LSD is the most philosophically demanding in this entire series: how do you build genuine access to states of vastness, significance, ego dissolution, and expanded awareness — without the pharmacological agent that was producing them?

The answer is not that you cannot. It is that every major contemplative tradition in human history was built around exactly this project. The DMN suppression that LSD produces through 5-HT2A agonism — the temporary dissolution of the ordinary self-referential machinery — is accessed through trained practice by meditators who have developed the concentration and equanimity to reach absorption states. The awe and significance that LSD unlocks are present in the structure of the natural world, encountered through deliberate attention, at scales both microscopic and cosmic. The pattern recognition that LSD amplifies is the same pattern recognition that underlies great creative work, scientific discovery, and profound spiritual insight.

What LSD was providing was rapid, ungated access to territories the nervous system already knows how to inhabit. Recovery is building the gate — and learning that the gate is what makes the territory genuinely navigable.

The Natural Access Points to What LSD Was Providing

What LSD provided	Natural access mechanism	How to implement	Recovery-specific notes
DMN suppression — ego dissolution — the temporary cessation of ordinary self-reference	Deep meditation — specifically absorption states (jhanas, samadhi)	Dharma Recovery (Protocol 04). Structured meditation program — MBSR, Vipassana, Zen, any systematic attention training. Minimum 20 minutes daily — build to longer sits over months.	The compendium explicitly connects ego dissolution to meditation: 'the progressive states of meditative concentration... the Buddhist jhanas, the Sufi hal, the Hindu samadhi... they were all accessing flow through the deliberate application of sustained attention to a worthy object.' The LSD user has been to

			this territory. Meditation is the path back on foot rather than by teleportation. It is slower, requires more preparation, and produces states that are more genuinely integrated because the ordinary self is not bypassed — it is gradually, deliberately, still present, learning to release.
Vast significance — the sense that everything is connected and matters	Awe in nature — genuine, non-pharmacologically induced	Deliberate awe practice: wilderness time, astronomical observation, deep ocean encounters, immensity of geological time, confrontation with scale — anything that genuinely produces awe.	Awe is neurobiologically real — it produces measurable changes in perspective-taking, reduced self-focused cognition (DMN modulation), increased sense of time availability, and enhanced connection. Stanford research on awe shows it is consistently one of the most powerful available non-pharmacological tools for shifting self-referential processing. For the LSD user who found significance in everything: nature and scale provide genuinely earned versions of the same state at their own pace.
Amplified pattern recognition — everything connecting to everything else	Creative work at the edge of competence — flow states	The compendium: 'dopamine, norepinephrine, endorphins, anandamide, and serotonin released simultaneously — a natural cocktail of the molecules that produce aliveness, focus, and the dissolution of the defended self.' Challenge-skill balance at the growth edge. Music, writing, code, mathematics, visual art — anything at the frontier of one's ability.	The enhanced pattern recognition of LSD and the pattern recognition of genuine creative flow share neurobiological territory. Both produce the sense of ideas connecting across previously separate domains. In flow, this is the brain operating at full capacity. In LSD, it is the brain operating without its normal filters. The creative flow version is slower to achieve — and produces genuine output, genuine skill growth, genuine legacy.
Perspective shift — the ordinary frame temporarily dissolved	Travel, novel environments, deliberately destabilizing the ordinary by entering	Immersive travel to genuinely different cultures, environments, or contexts. Learning frameworks that are genuinely different	LSD's perspective shift was produced by temporarily removing the perceptual filters that create the ordinary view. Genuine cultural and intellectual immersion achieves the same kind of filter-removal by

	genuinely unfamiliar territory	from one's own — other languages, other philosophical traditions, other scientific domains.	confronting the limits of the ordinary framework with something that does not fit inside it. This takes longer than a tab but produces more lasting reorganization.
Holotropic breathwork and NSDR — physiological access	Extended breathwork protocols produce genuine altered states through CO2/O2 balance changes; NSDR produces hypnagogic states with measurable DMN modulation	Holotropic breathwork (with trained guide): 30–40 fast deep breaths followed by breath retention cycles. Weekly or monthly. NSDR: 20–30 minutes daily lying still with guided body attention. Both provide non-pharmacological access to non-ordinary states.	The compendium references holotropic breathwork as one of the non-drug pathways to the territory LSD opens. For LSD users specifically: breathwork can produce states with phenomenological similarity to mild psychedelic experiences — providing a legitimate non-chemical access point while the 5-HT2A receptor system recovers.
Contemplative tradition — the sustainable path to the territory	Buddhist, Sufi, Christian contemplative, Hindu, Taoist, or any systematic tradition with a map of the expanded states and a community for holding them	Find the tradition that resonates with the specific territory LSD opened for you. Engage with it systematically rather than eclectically — one tradition's map, practiced consistently, goes deeper than sampling all of them.	Many people who began psychedelic use as teenagers or young adults have found, through the integration process, that the contemplative traditions were the destination LSD pointed toward. The psychedelic was the finger pointing at the moon. Integration is learning to look at the moon. The traditions have been studying the moon for millennia — they have detailed maps.

The Sonic Architecture for LSD Recovery

The compendium's psychedelic sonic protocol: 'expanded awareness — for feeling trapped in narrow perspective; integration of difficult material.' This is the appropriate sonic territory for LSD recovery — not the stimulant crash protocol (dopamine coaxing) or the depressant protocol (anxiety calming), but the expanded awareness protocol.

- During integration work: ambient, drone, minimal, and space music — Brian Eno, Stars of the Lid, Lustmord, Ólafur Arnalds. Provides sonic space for the integration content to move without direction or narrative.

- During meditation practice: silence, or overtone singing and Tibetan bowls. Specifically not music with lyrics — lyrics activate narrative processing that interferes with the non-narrative quality of deep meditation.
- For emotional processing of difficult trip content: the compendium's cross-cultural listening practices. Raga traditions (Indian classical), makam traditions (Middle Eastern), gagaku (Japanese court music). Emotional registers that Western music cannot access — specifically relevant to the non-Western emotional territory that LSD often opens.
- For grounding when perception is destabilized (HPPD, DP/DR): rhythm-based music with regular pulse — 60–70 BPM. Celtic, folk, acoustic. Physical instruments. Structural regularity in the sonic environment counterbalances perceptual instability.

Section 7 — Navigating the Recovery Kernel: Your Protocol Map

Phase	Protocols	Primary focus	LSD-specific notes
Cessation and stabilization (Weeks 1–4)	Protocol 01, Protocol 05, Protocol 17, Protocol 18	Complete psychedelic and cannabis cessation; sleep optimization; methylation support; anxiety management	Cessation of LSD AND cannabis simultaneously — cannabis exacerbates HPPD. Sleep becomes the primary biological recovery tool. 5-MTHF, magnesium glycinate, NAC, omega-3 DHA from Day 1. HPPD monitoring begins: journaling visual phenomena to track trajectory.
HPPD Assessment and Management (Weeks 1–12 if present)	Section 4 of this guide; physician if severe	HPPD characterization; anxiety management; neuroprotective stack; sleep protocol	HPPD that worsens significantly after 4–6 weeks of cessation and cannabis cessation warrants medical evaluation. HPPD that is stable or improving can be managed with Section 4's protocol. The critical question: is this HPPD or is something else happening? Reality testing is the key discriminator.
Genomic Mapping (Weeks 2–6)	Section 15 (Compendium), HTR2A, COMT, MTHFR, SLC6A4	5-HT2A receptor sensitivity; psychosis risk profile; methylation status; serotonin system assessment	HTR2A testing is the most novel genomic insight for LSD recovery — not available in standard panels from 23andMe/AncestryDNA but available through pharmacogenomic labs. COMT + DRD2 combination for psychosis risk assessment is available through standard panels.
Integration Work (Months 1–12+)	Protocol 04, Protocol 20, Protocol 21; external integration therapy	Journaling; contemplative practice; psychedelic-informed therapy; community	Integration is not a phase that ends — it is an ongoing practice. The first year of recovery involves the most intensive active integration work. The goal is the transformation of raw psychedelic experience into genuine wisdom, resolved questions, and behavioral change.
Natural Access Architecture (Months 2–12)	Protocol 04 (meditation); Protocol 03 (movement); Protocol 22 (nature); creative	Deep meditation; awe practice; creative flow; contemplative tradition; holotropic breathwork where appropriate	The natural access architecture for the states LSD was providing takes months to build. Meditation requires consistent daily practice over weeks before reliable access to the deeper states. Awe requires deliberate scheduling. Creative flow requires

	practice		sustained skill-building. These are investments, not substitutes.
Identity Work (Months 3–18+)	Protocol 20, Protocol 21, C-28; contemplative community	Integration of the worldview reorganization LSD initiated; the self that has been to the territory and returned; who this person is now	The LSD recovery identity question is unique in this series: not 'who am I without the drug' (standard addiction identity work) but 'what do I do with what the drug revealed?' This is a philosophical and existential question as much as a recovery question. The contemplative traditions hold better frameworks for this than conventional addiction treatment.
Long Game (Years 1–5+)	Protocol 24, Protocol 25, C-28, contemplative tradition	Purpose built on genuine wisdom; access to expanded states through earned practice; the life that the LSD was pointing toward	The person at five years of integrated LSD recovery — with a deep meditation practice, genuine creative work, community in a contemplative tradition, and the capacity for awe and significance in ordinary life — has built something the LSD was only sampling. They know the territory. They have a sustainable path through it.

Section 8 — The Medical and Therapeutic Context

8.1 — Medical Priorities in LSD Recovery

- HPPD evaluation: if visual phenomena are persistent and impairing, neurological and psychiatric evaluation is appropriate. A neurologist can rule out other causes of visual phenomena. An HPPD-informed psychiatrist can provide the specific management outlined in Section 4.
- Psychosis evaluation: if any psychotic features are present (lost reality testing, command hallucinations, persecutory beliefs, disorganized thinking that does not respond to grounding) — psychiatric emergency evaluation is required. This is not HPPD.
- Depersonalization/derealization: if DP/DR is severe and persistent (weeks or more), psychiatric evaluation. CBT-based DPDR therapy has evidence. Avoid SSRI prescription without discussion of the HPPD implications.
- 5-HT2A receptor recovery monitoring: there is no clinical test for this, but the progressive reduction in HPPD symptoms, the return of normal emotional responsiveness, and the normalization of perceptual processing over months of abstinence all reflect receptor recovery.
- CYP interaction assessment: if any medications are being taken, CYP3A4 and CYP2D6 inhibiting medications should be identified. While LSD is not being taken, this information is relevant for anyone who might be considering therapeutic psychedelics in the future.

8.2 — The Therapeutic LSD Question

THE CENTURION — The Same Molecule — The Same Complexity as Every Therapeutic Psychedelic

LSD was one of the first substances investigated for psychotherapeutic use — studies in the 1950s and 60s showed significant efficacy for alcoholism, anxiety, and depression before the political climate of the 1970s ended the research. The current psychedelic renaissance has returned LSD to clinical study, alongside psilocybin, MDMA, and ketamine.

For someone with LSD use disorder history: can therapeutic LSD ever be appropriate? The considerations mirror those in the ketamine and MDMA guides:

- The HPPD contraindication: existing HPPD is an absolute contraindication to therapeutic LSD — further 5-HT2A stimulation will worsen the condition regardless of the therapeutic framing.

- The psychosis risk: if LSD has previously precipitated psychotic features, therapeutic LSD is contraindicated regardless of dose or setting.
- The use disorder history: the risk of therapeutic LSD reactivating psychological dependence patterns is real and requires specific clinical assessment. The supervised, infrequent nature of therapeutic protocols provides some protection — but the person's history must be disclosed fully to the treating team.
- The integration prerequisite: therapeutic LSD without adequate integration support produces the same integration backlog as recreational LSD. The integration infrastructure must be established before and explicitly planned for after any therapeutic session.

The Recovery Kernel's position: therapeutic LSD in the context of LSD use disorder history requires addiction medicine specialist collaboration, full disclosure of history, HPPD clearance, psychosis risk assessment, and an integration plan that exceeds what standard therapeutic protocols provide. This is not a categorical exclusion — it is a categorical requirement for specificity and care.

8.3 — Medications Relevant to LSD Recovery

- For HPPD (as detailed in Section 4): clonazepam (short-term only), lamotrigine. Avoid SSRIs for HPPD specifically.
- For anxiety (common in LSD recovery, especially with HPPD and DP/DR): buspirone (non-addictive); hydroxyzine (acute anxiety); the full non-pharmacological anxiety toolkit from Section 4.3.
- For depression (if present independently of LSD recovery): 5-MTHF assessment first; SSRIs with HPPD awareness; SNRI if serotonergic anxiety is not the primary presentation.
- For sleep: the full sleep protocol from Section 3; low-dose melatonin (0.5–1mg); magnesium glycinate. Avoid benzodiazepines for sleep — clonazepam has a specific role in HPPD management but not as a sleep aid.

A Final Word

THE CENTURION — The Significance Was Not an Illusion. The Path to It Was.

The compendium holds the most honest frame for what LSD did: 'The universe opened up. Prefrontal inhibition created a sense of vast significance. Brain event named accurately; the significance is the brain interpreting its own altered state.'

All three parts of this are true. The universe opened up — this is phenomenologically accurate; that is what the experience was. Prefrontal inhibition created a sense of vast significance — this is mechanistically accurate; that is what LSD does. The significance is the brain interpreting its own altered state — this is integrationally accurate; the significance was real, and it was the brain's own significance, temporarily unmediated by the filtering apparatus that ordinarily screens most of the world's significance out.

Here is what this means for recovery: the significance was not an illusion. The brain contains the capacity for significance — for encountering the world as meaningful, connected, and worth attending to — as its own native feature. LSD was not importing significance from somewhere else. It was removing the filter that obscures the significance already present.

Every contemplative tradition has known this. The meditator who reaches the jhana states is not creating something new — they are encountering what was always there, behind the noise. The mystic in the dark night of the soul is passing through the emptying of ordinary significance toward the kind that does not require a filter to obscure it. The philosopher who reaches genuine wonder at the existence of anything rather than nothing is experiencing the same opening through a different door.

LSD was a shortcut to those rooms. It was rapid, ungated, often overwhelming, and without the preparation that makes the navigation genuinely useful rather than merely intense. The rapid tolerance that makes daily use impossible was, in some sense, the molecule protecting the territory from casual colonization.

Recovery from LSD is the building of the gate. The gate is meditation, practice, contemplative tradition, creative work, genuine awe, and sustained attention to the one life available. The gate is slower than a tab under the tongue. It is also more genuinely yours — earned rather than borrowed, built rather than chemically induced, capable of sustaining rather than requiring escalation.

The universe is still open. It was always open. Recovery is learning to walk in without pharmacological assistance, carrying the integration of what the LSD trips showed you, able to live in what was revealed.

The significance was real. The path to it has been found.

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HPPD resources: hppd-online.com | Zendo Project psychedelic support: zendoproject.org | MAPS: maps.org

Refer to the Recovery Kernel Complete Centurion Compendium for all referenced protocols.

Crisis: call or text 988 | Emergency: 911 | SAMHSA: 1-800-662-4357

⚠ HARM REDUCTION RESOURCE — NOT MEDICAL ADVICE